NHDES

The State of New Hampshire Department of Environmental Services



AGGREGATED PRECIPITATION DATA for N.H. DROUGHT MANAGEMENT AREAS

		Deviation					
	Actual	Normal	from	Percent			
	Rainfall	Rainfall	Normal	of			
	(inches)	(inches)	(inches)	Normal			
Coastal Drainage: F	Rockingham, Straff	ord counties					
four month	17.18	16.59	0.60	104%			
six month	25.27	23.88	1.39	106%			
nine month	41.62	35.64	5.98	117%			
twelve month	50.32	46.02	4.30	109%			
Southern Interior: B	elknap, Hillsborouç	gh, Merrimack coun	ties				
four month	16.15	15.29	0.86	106%			
six month	22.89	22.97	-0.08	100%			
nine month	37.15	34.26	2.89	108%			
twelve month	44.87	44.32	0.55	101%			
South Western: Che							
four month	15.33	14.57	0.77	105%			
six month	21.97	22.57	-0.60	97%			
nine month	33.79	33.87	-0.08	100%			
twelve month	41.15	43.73	-2.59	94%			
White Mountain: Ca	rroll, Grafton count	ties					
four month	18.19	16.33	1.86	111%			
six month	27.48	24.94	2.54	110%			
nine month	40.49	37.13	3.36	109%			
twelve month	47.88	46.86	1.02	102%			
North Country: Coos	o county						
four month	18.18	16.37	1.81	111%			
six month	27.69	25.60	2.09	108%			
nine month	42.02	37.96	4.06	111%			
twelve month	51.40	46.97	4.43	109%			
CVV CIV C III CIII III	51.40	70.57	7.70	10070			

four month period : September 2007 - December 2007 six month period : July 2007 - December 2007 nine month period : April 2007 - December 2007 twelve month period: January 2007 - December 2007

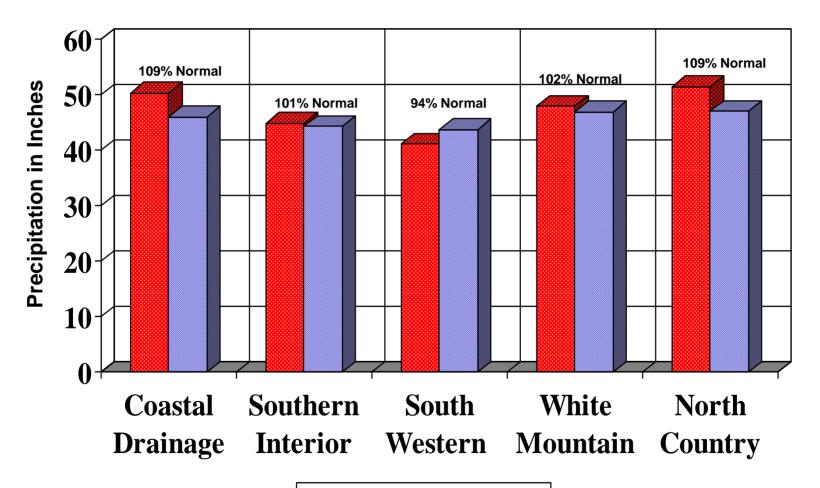
Source: Northeast River Forecast Center, NH Des Dam Bureau

P.O. Box 95, 29 Hazen Drive, Concord, New Hampshire 03302-0095

Telephone: (603) 271-3503 • Fax: (603) 271-7894 • TDD Access: Relay NH 1-800-735-2964

DES Web site: www.des.nh.gov

TWELVE MONTH AGGREGATED PRECIPITATION DATA for N.H. DROUGHT MANAGEMENT AREAS from January 2007 through December 2007







MONTHLY PRECIPITATION DATA FOR N.H COUNTIES

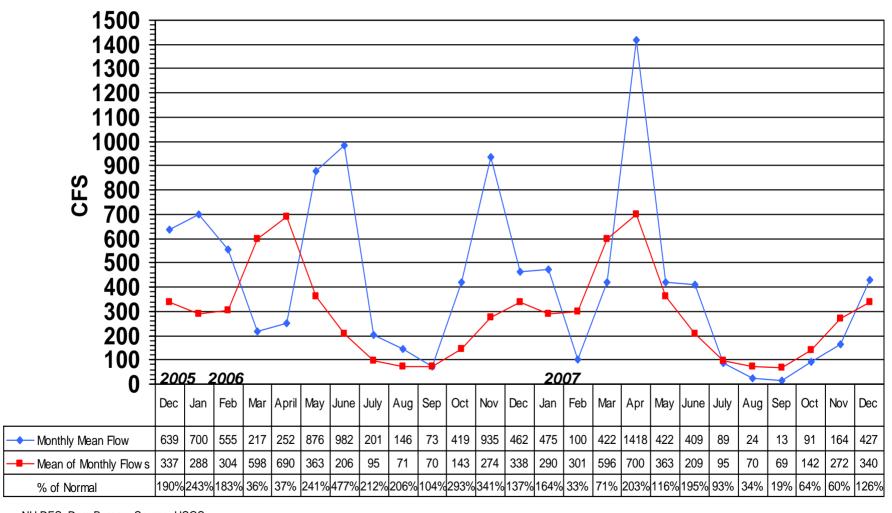
		2007											
		JAN	FEB	MARCH	APRIL	MAY	JUNE	JULY	AUG	SEPT	OCT	NOV	DEC
Coastal drainage													
STRAFFORD	actual	3.02	1.59	3.94	9.98	3.39	3.14	7.11	2.44	4.34	4.91	4.41	4.94
	normal	3.12	3.12	4.02	4.39	3.88	3.77	3.75	3.69	3.77	4.39	4.71	3.99
	deviation	-0.10	-1.53	-0.08	5.59	-0.49	-0.63	3.36	-1.25	0.57	0.52	-0.30	0.95
ROCKINGHAM	actual	2.94	1.54	4.37	8.92	3.95	3.33	5.15	1.47	2.88	4.42	3.77	4.69
	normal	3.32	3.32	3.86	4.12	3.69	3.68	3.59	3.55	3.76	4.20	4.42	3.93
	deviation	-0.38	-1.78	0.51	4.80	0.26	-0.35	1.56	-2.08	-0.88	0.22	-0.65	0.76
Average	actual	2.98	1.57	4.16	9.45	3.67	3.24	6.13	1.96	3.61	4.67	4.09	4.82
· ·	normal	3.22	3.22	3.94	4.26	3.79	3.73	3.67	3.62	3.77	4.30	4.57	3.96
	deviation	-0.24	-1.66	0.22	5.20	-0.12	-0.49	2.46	-1.67	-0.16	0.37	-0.48	0.86
Southern Interior													
HILLSBOROUGH	l actual	3.08	1.54	4.17	8.09	3.96	3.18	5.33	0.93	3.30	4.36	3.32	4.50
	normal	3.60	3.60	3.88	3.89	3.81	3.75	3.75	3.78	3.67	4.16	4.18	3.84
	deviation	-0.52	-2.06	0.29	4.20	0.15	-0.57	1.58	-2.85	-0.37	0.20	-0.86	0.66
MERRIMACK	actual	2.93	1.45	3.95	8.53	3.59	2.68	4.83	1.71	3.33	4.59	3.80	5.64
	normal	3.16	3.16	3.51	3.66	3.84	3.66	3.81	3.78	3.52	3.97	3.97	3.56
	deviation	-0.23	-1.71	0.44	4.87	-0.25	-0.98	1.02	-2.07	-0.19	0.62	-0.17	2.08
BELKNAP	actual	2.04	1.15	2.84	7.49	2.79	2.47	5.40	2.03	3.39	3.82	4.11	4.28
	normal	2.92	2.92	3.42	3.66	3.82	3.79	4.08	3.84	3.55	4.00	3.94	3.50
	deviation	-0.88	-1.77	-0.58	3.83	-1.03	-1.32	1.32	-1.81	-0.16	-0.18	0.17	0.78
Average	actual	2.68	1.38	3.65	8.04	3.45	2.78	5.19	1.56	3.34	4.26	3.74	4.81
Wordgo	normal	3.23	3.23	3.60	3.74	3.82	3.73	3.88	3.80	3.58	4.04	4.03	3.63
	deviation	-0.54	-1.85	0.05	4.30	-0.38	-0.96	1.31	-2.24	-0.24	0.21	-0.29	1.17
South Western													
CHESHIRE	actual	2.91	1.22	2.77	5.49	2.66	2.94	4.49	1.52	3.20	4.17	3.34	3.78
oo	normal	3.28	3.28	3.60	3.64	3.97	3.81	4.03	4.05	3.57	3.82	3.80	3.51
	deviation	-0.37	-2.06	-0.83	1.85	-1.31	-0.87	0.46	-2.53	-0.37	0.35	-0.46	0.27
SULLIVAN	actual	3.24	1.64	2.94	6.23	3.02	3.29	5.50	1.77	3.09	5.23	3.58	4.27
00	normal	3.12	3.12	3.33	3.52	3.90	3.75	4.00	3.93	3.63	3.87	3.67	3.26
	deviation	0.12	-1.48	-0.39	2.71	-0.88	-0.46	1.50	-2.16	-0.54	1.36	-0.09	1.01
Average	actual	3.08	1.43	2.86	5.86	2.84	3.12	5.00	1.65	3.15	4.70	3.46	4.03
Wordgo	normal	3.20	3.20	3.47	3.58	3.94	3.78	4.02	3.99	3.60	3.85	3.74	3.39
	deviation	-0.13	-1.77	-0.61	2.28	-1.10	-0.67	0.98	-2.35	-0.46	0.86	-0.28	0.64
White Mountain			••••							31.10		0:-0	
GRAFTON	actual	2.55	2.18	3.29	5.13	3.24	3.08	5.67	3.41	3.69	5.60	4.47	4.31
01011 1011	normal	2.92	2.92	3.60	3.73	4.01	4.26	4.34	4.42	4.05	4.19	4.21	3.66
	deviation	-0.37	-0.74	-0.31	1.40	-0.77	-1.18	1.33	-1.01	-0.36	1.41	0.26	0.65
CARROLL	actual	2.31	1.58	2.86	8.10	3.24	3.23	6.35	3.15	3.18	4.82	5.35	4.96
37 II TITOLL	normal	3.00	3.00	4.01	4.05	4.19	4.14	4.25	4.21	3.88	4.37	4.33	3.97
	deviation	-0.69	-1.42	-1.15	4.05	-0.95	-0.91	2.10	-1.06	-0.70	0.45	1.02	0.99
Average	actual	2.43	1.88	3.08	6.62	3.24	3.16	6.01	3.28	3.44	5.21	4.91	4.64
TVCIAGE	normal	2.43	2.96	3.81	3.89	4.10	4.20	4.30	4.32	3.44	4.28	4.27	3.82
	deviation	-0.53	-1.08	-0.73	2.73	-0.86	-1.05	1.72	-1.04	-0.53	0.93	0.64	0.82
North Country	deviation	-0.00	-1.00	-0.73	2.10	-0.00	-1.00	1.72	-1.04	-0.00	0.30	0.04	0.02
	o otuo!	2.47	2.50	2.00	6.50	4.05	2.50	4.00	4.00	2.20	E 00	E 40	4.40
coos	actual	3.17 2.72	2.58 2.72	3.63 3.57	6.58 3.61	4.25 4.14	3.50 4.61	4.63 4.53	4.88 4.70	3.30 4.25	5.26 4.13	5.46 4.24	4.16 3.75
	normal												

Source: Northeast River Forecast Center, NH DES Dam Bureau

LAMPREY RIVER near NEWMARKET NH Gage# 01073500



MONTHLY MEAN FLOW COMPARED TO MEAN OF MONTHLY FLOWS



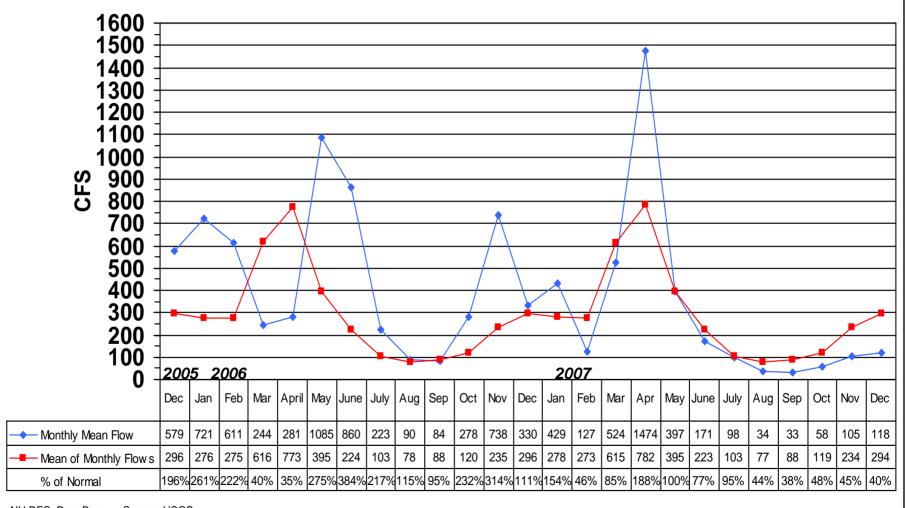
NH DES, Dam Bureau, Source: USGS

Start of record 1934

SOUHEGAN RIVER at MERRIMACK NH Gage# 01094000



MONTHLY MEAN FLOW COMPARED TO MEAN OF MONTHLY FLOWS



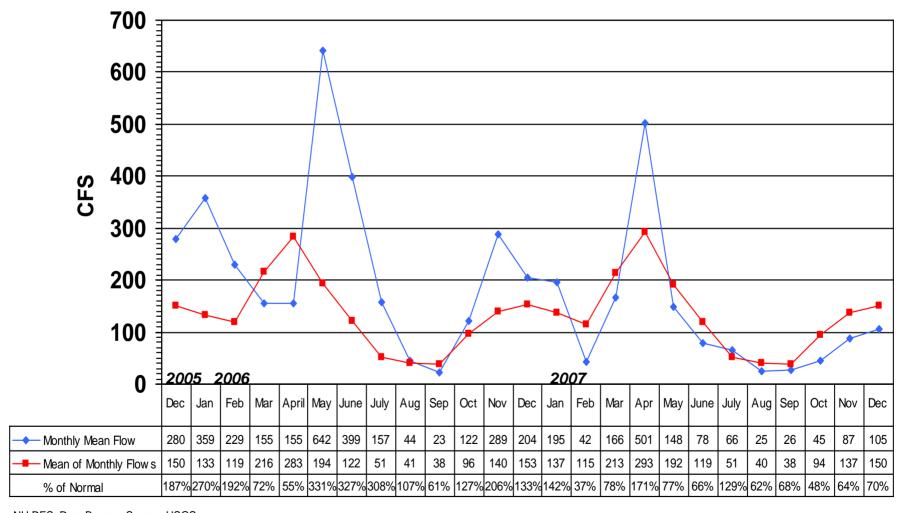
NH DES, Dam Bureau, Source: USGS

Start of record 1909

SOUCOOK RIVER at PEMBROKE ROAD near CONCORD NH, Gage# 01089100



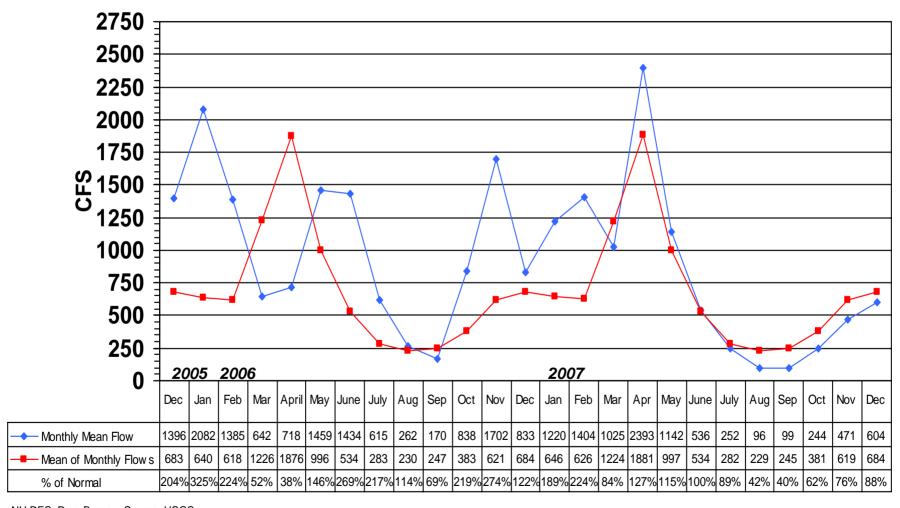
MONTHLY MEAN FLOW COMPARED TO MEAN OF MONTHLY FLOWS



ASHUELOT RIVER at HINSDALE NH Gage# 01161000



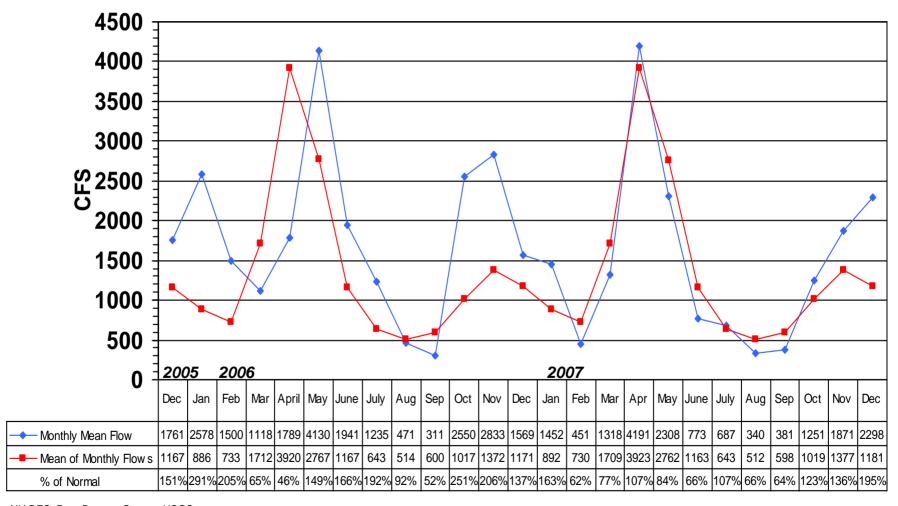
MONTHLY MEAN FLOW COMPARED TO MEAN OF MONTHLY FLOWS



PEMIGEWASSET RIVER at PLYMOUTH NH Gage# 01076500



MONTHLY MEAN FLOW COMPARED TO MEAN OF MONTHLY FLOWS

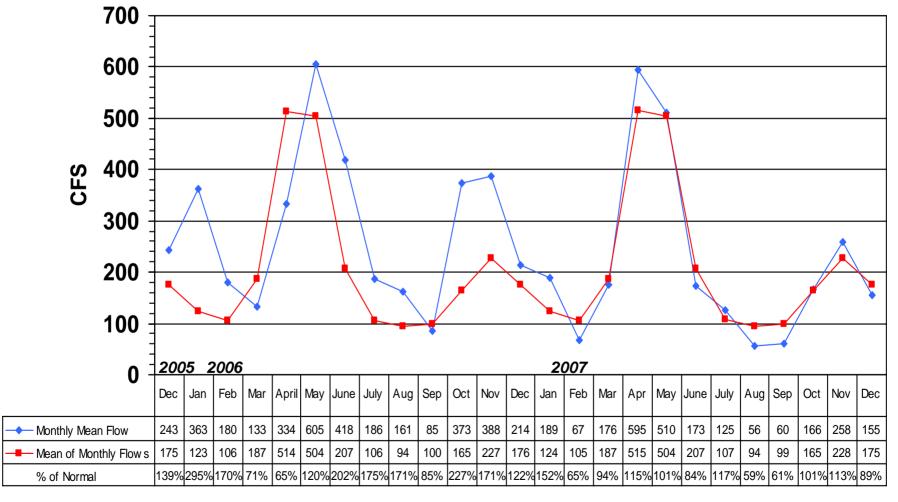


AMMONOOSUC RIVER at BETHLEHEM JUNCTION NH Gage# 01137500



MONTHLY MEAN FLOW COMPARED TO MEAN OF MONTHLY FLOWS

This station replaces gage# 01137000 which was discontinued by DES at the end of Sept 2004



NH DES, Dam Bureau, Source: USGS

Start of record 1939

STREAMFLOW DATA FOR SELECTED NH STATIONS AS OF JANUARY 8, 2008



Station		Est. Mean	Long Term	99%	7Q10	Lowest Period of Record	% of	Below 0.99	Below 7Q10	Below Record
number	Station name	Flow (cfs)	Median Flow	Flow (cfs)	Flow (cfs)	Daily Flow (cfs)	Median		Flow?	Flow?
Androscogo	gin River Basin									
01052500	Diamond River near Wentworth Location, NH	Ice	115	22	16	6.8	#VALUE!	#VALUE!	#VALUE!	#VALUE!
01053500	Androscoggin River at Errol, NH	1,720	1,690	500	451	0	102%	FALSE	FALSE	FALSE
01054000	Androscoggin River near Gorham, NH	2,250	2,000	1300	1310	795	113%	FALSE	FALSE	FALSE
Saco River										
	Saco River near Conway, NH	Ice	370	105	97	66			#VALUE!	
01064801 E	BEARCAMP RIVER AT SOUTH TAMWORTH, NH	Ice	70	6	4.8	4.5	#VALUE!	#VALUE!	#VALUE!	#VALUE!
Piscataqua										
	COCHECO RIVER NEAR ROCHESTER, NH	Ice	101			2.2			#VALUE!	
01073500 l	LAMPREY RIVER NEAR NEWMARKET, NH	Ice	250	7	5		#VALUE!	#VALUE!	#VALUE!	#VALUE!
Merrimack I										
	EAST BRANCH PEMIGEWASSET RIVER AT LINCOLN, NH	435	130		49	46	335%	FALSE	FALSE	FALSE
	PEMIGEWASSET RIVER AT WOODSTOCK, NH	735	185		56		397%	FALSE	FALSE	
	BAKER RIVER NEAR RUMNEY, NH	Ice	105		15			#VALUE!		
	PEMIGEWASSET RIVER AT PLYMOUTH, NH	Ice	640		118	45			#VALUE!	
	SMITH RIVER NEAR BRISTOL, NH	155	70		6.2	2.7	221%	FALSE	FALSE	FALSE
	WINNIPESAUKEE RIVER AT TILTON, NH	1,270	718		136	48	177%	FALSE	FALSE	FALSE
	MERRIMACK RIVER AT FRANKLIN JUNCTION, NH	2,760	1,850		551		149%	W (A) 1151	FALSE	
	CONTOOCOOK RIVER AT PETERBOROUGH, NH	Ice	80		6.3		#VALUE!	#VALUE!		
	CONTOOCOOK RIVER NEAR HENNIKER, NH	666			37		4000/	FALSE	FALSE	
	CONTOOCOOK R BL HOPKINTON DAM AT W HOPKINTON, NH	787	430		39		183%	FALSE	FALSE	
	WARNER RIVER AT DAVISVILLE, NH	215	127		5.3		169%	FALSE	FALSE	
	BLACKWATER RIVER NEAR WEBSTER, NH	198 76			13.7			FALSE	FALSE	
***************************************	PISCATAQUOG RIVER BL EVERETT DAM, NR E WEARE, NH	221			1.2 8.8	 		FALSE FALSE	FALSE FALSE	
	PISCATAQUOG RIVER NEAR GOFFSTOWN, NH MERRIMACK R NR GOFFS FALLS, BELOW MANCHESTER, NH	5,010	3.740		644	98*	134%	FALSE	FALSE	
***************************************	SOUHEGAN RIVER AT MERRIMACK, NH	155	205		12.9	90	76%	FALSE	FALSE	
01094000	SOUREGAN RIVER AT WERRIWACK, NO	100	200		12.9		70%	FALSE	FALSE	
	t River Basin CONNECTICUT R BELOW INDIAN STREAM NR PITTSBURG, NH	921	749		42	30	123%	FALSE	FALSE	FALSE
***************************************	CONNECTICUT RIVER AT NORTH STRATFORD, NH	Ice	1,190		176	108			#VALUE!	
	CONNECTICUT RIVER NEAR DALTON, NH	2,600	1,700		389	115	153%	FALSE	FALSE	FALSE
	AMMONOOSUC RIVER AT BETHLEHEM JUNCTION, NH	Ice	84		28	21			#VALUE!	
	CONNECTICUT RIVER AT WELLS RIVER, VT	5,050	3,400		690	152*	149%	#VALUE:	FALSE	#VALUE:
	CONNECTICUT RIVER AT WEST LEBANON, NH	6,430	4,570	380*	902	82*	141%		FALSE	
	SUGAR RIVER AT WEST CLAREMONT, NH	517	250	40	38	14	207%	FALSE	FALSE	FALSE
	CONNECTICUT RIVER AT NORTH WALPOLE, NH	10,200	6,000	260*	1058	115*	170%	· ALOL	FALSE	. / \
	ASHUELOT RIVER BELOW SURRY MT DAM, NEAR KEENE, NH	192	96	4.5	2.7	0.4	200%	FALSE	FALSE	FALSE
	OTTER BROOK BELOW OTTER BROOK DAM, NEAR KEENE, NH	73	46	1.6	1.1	0.3	159%	FALSE	FALSE	FALSE
	ASHUELOT RIVER AT WEST SWANZEY, NH	519	553	32			94%	FALSE	-	

^{*}Flow duration and record low mean daily flow significantly affected by reservoir operations

Source: USGS, NH DES

SUMMARY	Below	Below	Below		
	0.99	7Q10	Record		
	Flow?	Flow?	Flow?		
FALSE =	19	23	10		
TRUE =	0		0		

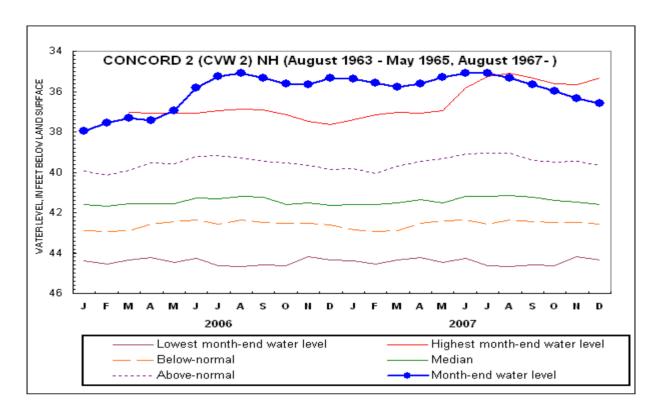
^{**}Estimated

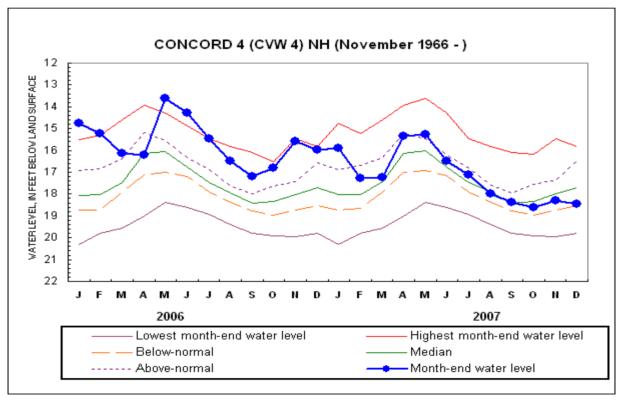
New Hampshire Groundwater Levels for December 2007

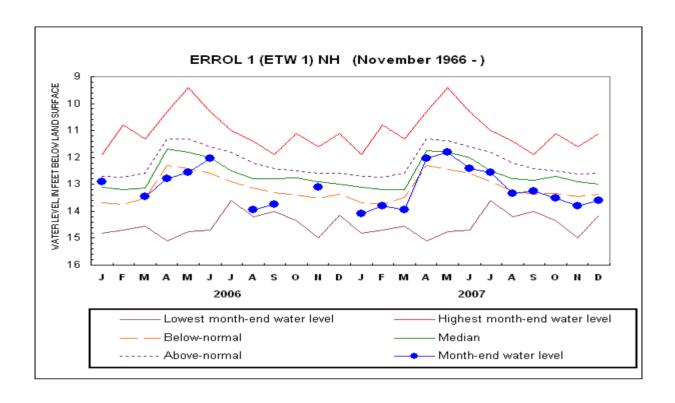


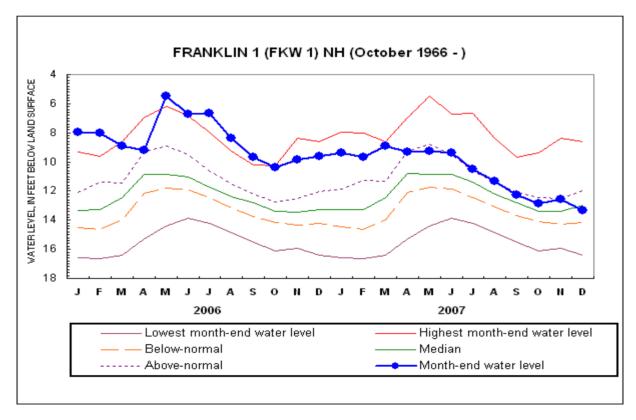
	START OF	WATER LEVEL BELOW	NET CHANGE	NET CHANGE			DEPARTURE FROM	PERCENT OF	
<u>WELL</u>	RECORD	SURFACE DATUM (ft)	IN ONE MONTH (ft)	IN ONE YEAR (ft)	<u>MEDIAN</u>	RANGE (ft)	MONTHLY MEDIAN (FT)	RANGE	<u>STATUS</u>
ALBANY 14	1995	6.25	-0.33	-0.44	5.93	1.27	-0.32	-25.2	NORMAL
ALBANY 15	1995	8.10	-0.13	-1.27	7.95	1.07	-0.15	-14.0	NORMAL
BARNSTEAD 10	1995	2.41	-0.01	+0.34	2.63	0.85	+0.22	25.9	ABOVE NORMAL
CAMPTON 34	1988	12.70	-0.37	-0.27	12.43	1.44	-0.27	-18.7	NORMAL
COLEBROOK 73	1995	6.63	+0.64	+0.87	7,17	2.75	+0.54	19.6	ABOVE NORMAL
CONCORD 2	1963	36.60	-0.25	-1.26	41.59	6.25	+4.99	79.8	ABOVE NORMAL
CONCORD 4	1966	18.45	-0.17	-2.49	17.72	2.08	-0.73	-35.1	NORMAL
DEERFIELD 46	1984	39.40	-0.06	-1.41	38.96	0.80	-0.44	-55.0	NORMAL
ENFIELD 30	1990	5.39	+0.10	-3.05	6.28	4.47	+0.89	19.9	NORMAL
ERROL 1	1966	13.6	+0.2		13.0	1.1	-0.6	-52.2	BELOW NORMAL
FRANKLIN 1	1966	13.35	-0.79	-3.72	13.00	3.42	-0.35	-10.2	NORMAL
GREENFIELD 75	1995	61.79	-0.58	-1.51	62.36	2.81	+0.57	20.3	NORMAL
HOOKSETT 5	1965	49.26	+0.60	-1.79	47.90	3.91	-1.36	-34.8	BELOW NORMAL
KEENE 2	1963	2.72	-0.15	-0.37	3.30	2.29	+0.58	25.3	NORMAL
LANCASTER 1	1966	1.30	+0.10	+0.50	1.67	2.67	+0.37	13.9	NORMAL
LEE 1	1953	31.24	-0.61	-0.67	31.04	1.36	-0.20	-14.7	NORMAL
LISBON 19	1990	11.46	+1.78	+2.23	13.06	2.08	+1.60	76.9	ABOVE NORMAL
NASHUA 218	1964	28.25	+0.10	-1.17	28.08	4.20	-0.17	-4.0	NORMAL
NEW DURHAM 53	1986	19.26	-0.10	-0.35	18.90	1,26	-0.36	-28.6	BELOW NORMAL
NEW LONDON 1	1947	8.88	+0.47	-1.05	8.14	8.76	-0.74	-8.4	NORMAL
NEWPORT 3	1995	6.23	+0.05	-0.66	5.53	1.62	-0.70	-43.2	NORMAL
NEWPORT 6	1995	6.34	-0.09	-0.66	5.61	1.61	-0.73	-45.3	NORMAL
OSSIPEE 38	1995	35.73	-0.13	-1.34	35.74	2.15	+0.01	0.5	NORMAL
SHELBURNE 2	1995	5.25	-0.23	-0.95	4.30	0.91	-0.95	-104.4	BELOW NORMAL
	1965	31.18	+0.09	-1.75	30.98	2.72	-0.20	-7.4	NORMAL

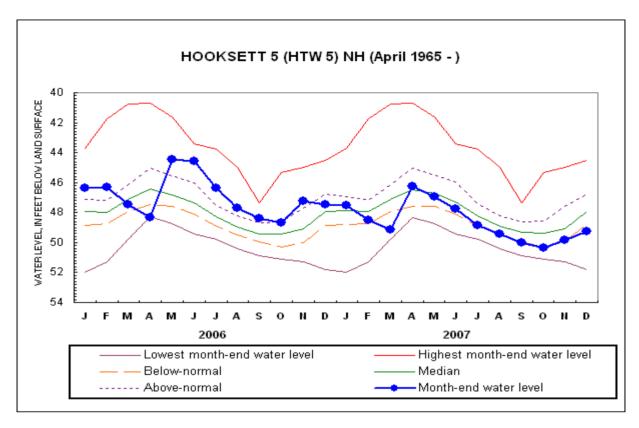
Source: USGS, NH DES

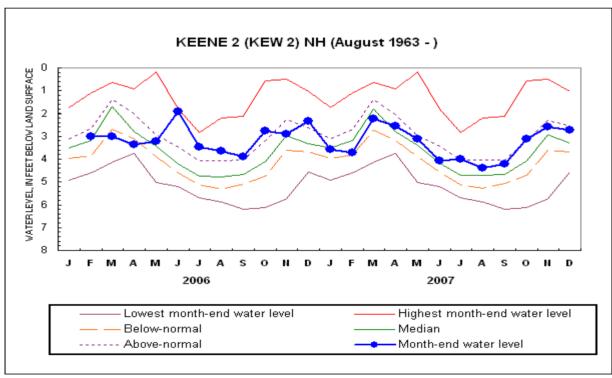


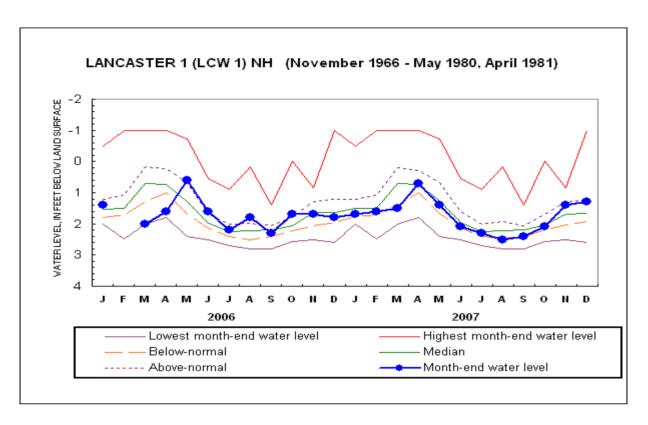


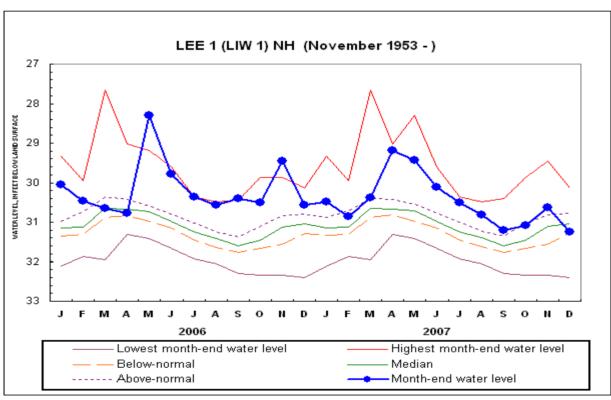


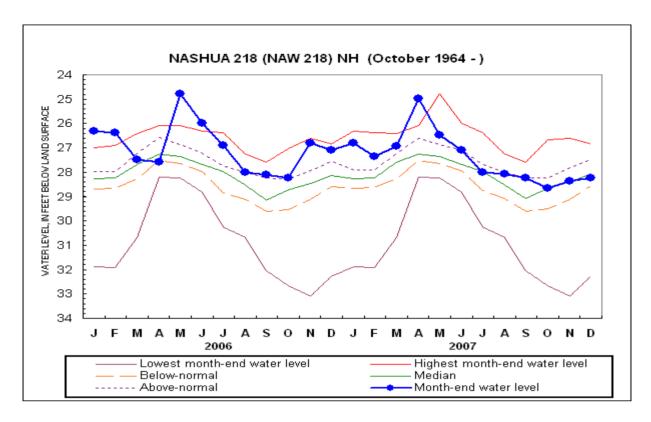


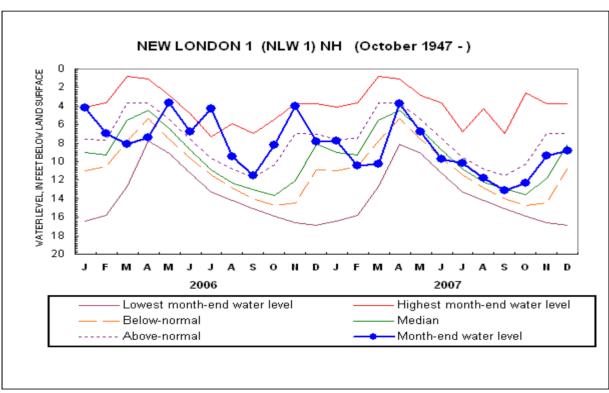


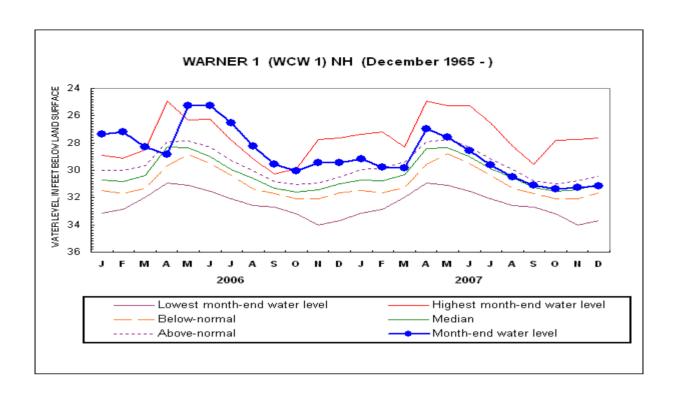






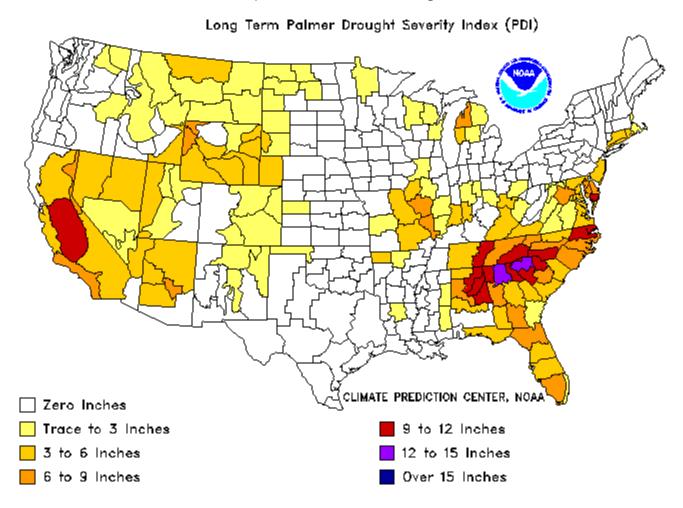






Additional Precip. Needed (In.) to Bring PDI to -0.5

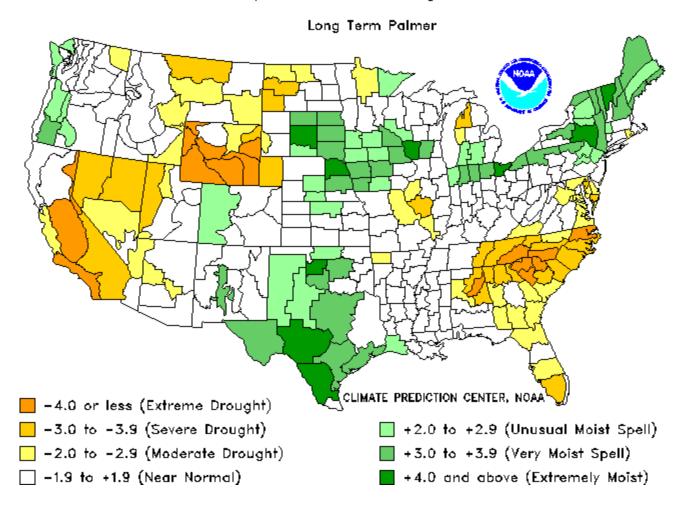
Weekly Value for Period Ending 1 DEC 2007



This is the amount of rainfall required in a week's time to bring the index back to zero inches required.

Drought Severity Index by Division

Weekly Value for Period Ending 1 DEC 2007



THE PALMER DROUGHT SEVERITY INDEX

The Palmer Index uses temperature and rainfall information in a formula to determine dryness. The advantage of the Palmer Index is that it is standardized to local climate.